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Commissioner James D. Boyd, Presiding Member
Commissioner William J. Keese, Associate Member
Ad Hoc Integrated Energy Policy Report Committee
Docket No. 02-IEP-01
Docket Unit, MS-4
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Subject: Comments on Staff Proposed Issues for Consideration to Develop the Integrated Energy Policy Report

Commissioners Boyd and Keese:

On behalf of the San Diego Regional Energy Office (SDREO), I am pleased to submit these comments on the subject proceeding. The SDREO shares the Energy Commission's concern and priority in developing a longer term outlook for the adequacy of energy resources to support the needs of the State and in particular, the San Diego Region. In support of that goal, SDREO, in partnership with the City of San Diego, the County of San Diego, the San Diego County Water Authority, the San Diego Association of Governments, the Utility Consumers Action Network, and the Port of San Diego, recently completed an Energy Infrastructure Study for the San Diego region that examined the electricity and natural gas needs and potential resources, including alternatives through the year 2030. A copy of this Study is enclosed for your information. A separate, but related report, focusing on energy issues in the California Baja California border region is also included.

SDREO intends to update the data developed in the Study on an annual basis, and also conduct follow-up initiatives that address specific issues, including more detailed examination of the potential for energy efficiency, demand response, and distributed resources to mitigate the stress on existing infrastructure and supply a greater percentage of the future growth in the region. Although SDREO has not expanded its focus to

include transportation fuels to date, we will be evaluating what role we can and should play in this area on behalf of the region.

In conducting this ongoing resource planning for the region, SDREO staff looks forward to working closely with Energy Commission Staff and Commissioners to leverage our efforts to the greatest extent possible.

Specific comments on the Potential Issues outlines by the Energy Commission follow:

ISSUE 1: INFRATSRUCTURE AND CONSTRAINT IMPLICATIONS.

• *What infrastructures might emerge given differing physical, market and regulatory uncertainties?*

One finding of the San Diego Regional Energy Infrastructure Study (REIS) was that in order to meet future electricity and natural gas demands the region will need to depend in a much greater degree on alternatives such as energy efficiency, demand response, distributed generation and renewables. Ensuring that the existing grid-based infrastructure, regulations and tariff structures support the maximum use of those alternatives is crucial. For example, time-of-use and time-of-day pricing to encourage demand response requires meaningful support from tariff structures and at some point will need to evolve from voluntary programs that may have insufficient incentives to promote meaningful customer participation. Also, many opportunities for distributed generation resources continue to be lost due to regulatory constraints posed by standby charges, potential exit fees and wheeling limitations. San Diego County is in a non-attainment zone for ozone and all new major emission sources must be met with offsets from other sources in the county. The availability of NOx emission reduction credits (ERCs) is severely limited in San Diego, which is a significant barrier to the building of new power plants. SDREO would like to see an offset market developed in which future power plant developers could invest in demand reduction and clean generation opportunities in the county or even Baja, California. These actions would create emission credits in order to use more combustible fuels. Power plant developers could co-invest in in-region efficiency and renewable efforts to create the offsets for power plants and expanded opportunities to create new ERCs by funding the conversion of diesel-powered trucks and boats with natural gas via Mobile Source Emission Credits (MSEC) through Rule 27. The Commission should evaluate the role of Mexican power plants and natural gas facilities in providing utility services to the San Diego region. Also, the SDREO supports more regulatory certainty to allow markets to develop and private capital to invest in energy infrastructure.

• *What regional, statewide and local transmission upgrades would benefit California, compared to generation, natural gas or demand reduction options?*

While the REIS examined and recognized transmission as a critical means to supply the San Diego Region from regions outside San Diego, the Study's findings with regard to

the increasing dependence of the San Diego region on imports is of concern. In some respects, the existing regulatory system that allows the evaluation of transmission without a firm assurance of a certain level of generation within the region could result in an overbuilding of transmission infrastructure and placing the San Diego region in a position of greater exposure to future supply scarcity and price volatility, particularly when transmission locational marginal pricing is fully implemented.

• *If beneficial upgrades are identified, what State actions are appropriate?*

When beneficial upgrades are identified the state should execute its regulatory review process in a timely manner.

• *What methods are available for affecting transportation energy demand?*

While SDREO has not completed a rigorous study of the issues in the San Diego region, we have been following the industry move away from electric and natural gas vehicles toward hybrid-powered vehicles. Because of this trend, SDREO encourages the State to align its programs and incentives to promote hybrid vehicles to the greatest extent possible as a transition technology until more advanced technologies, like fuel cells, are available.

• *What are the implementation issues associated with the Renewable Portfolio Standard?*

SDREO believes there are opportunities for co-development of renewable projects to assist the IOUs in achieving their Renewable Portfolio Standard goals. For example, SDREO is pursuing potential aggregation and procurement support for renewable resources that would allow large-scale deployment of solar system on public agency buildings. Implementation of similar strategies statewide through collaboration with California Power and Conservation Financing Authority bonding capability could greatly enhance the states chances of achieving the RPS goals sooner than may otherwise be achieved. In addition, transmission infrastructure needs need to be addressed to allow for the development of available wind resources in the eastern portion of San Diego County. State rules on wheeling of power currently have a negative effect on the development of large-scale renewable power projects. Excess renewable power generated at one site must be sold at wholesale prices rather than be wheeled to an owner's second site.

ISSUE 2: ADEQUACY, RELIABILITY AND RISK

• *What would the State need to do to foster more reliable energy services?*

The State should remove regulatory uncertainties that prohibit the growth of private power generation. Perhaps a price incentive could be paid for excess capacity. Demand

response pricing and time-of-use meters could flatten peak load, thereby increasing reliability. With dynamic pricing solar energy makes more economic sense since photo - voltaics generate the most power at peak demand periods. Upgraded transmission helps reliability, as does distributed generation of all types. Current rules are not favorable to distributed generation.

• *What are the trade-offs in alternative means of securing reliable electricity, natural gas and transportation fuels supplies?*

Some trade-offs are not acceptable to the residents of the San Diego region. Actions such as allowing greater air pollution in return for more reliability, or increased visual pollution with the addition of more transmission lines are not acceptable trade-offs. SDREO is investigating greater energy trading with Mexico. The trade off would be some inherent loss of control, but that trade-off might be more acceptable. SDREO believes that priority should be placed on initiatives that reduce the peak demand, the primary driver for infrastructure-initiatives.

• *How should California deal with the increased natural gas supply and price uncertainty caused by the tighter integration of the natural gas and electricity markets?*

All real markets have some price volatility. The State should permit and encourage more financial risk mitigation instruments to allow the risk-adverse to hedge the market. The issue is how we handle the risk, not necessarily the price volatility.

• *Should the State set targets for energy efficiency to achieve a better mix of energy efficiency, load management and demand response programs?*

Setting discrete goals for energy efficiency, demand response and other load management programs could result in the development of uneconomic projects. Setting goals with financial incentives would provide more encouragement to distribution utilities and potential power generators.

ISSUE 3: PRICES, VOLITILITY AND CONSUMER RESPONSE

• *What are the current policies affecting the ability of customers to decide to change or reduce their loads on the energy supply system?*

While there has been significant improvement in identifying barriers to distributed generation, many remain. Better alignment of benefits between the customer and the distribution utility needs to be achieved. For example, customers that are in the position to generate greater amounts of energy than can be used at certain facilities (e.g. cities and water agencies), should not be penalized by being limited to selling excess power at avoided costs and by restrictions on wheeling. Rather, customers that have the means to

produce excess capacity should be able to share a higher portion of the benefits that is commensurate with the investment and risk assumed by building generation that supports the overall system needs.

• *What demand responsive capacity might be achieved in the future, and what policies would affect this? How much can we count on demand responsive programs and tariffs to reduce peak?*

The State should place an emphasis on achieving consistency and longer-term time horizons for demand response programs. While benefit of these programs may be marginal during the next few years while supply resources are relatively plentiful, sufficient incentive needs to be available for customers to commit to these programs long-term so that they are available in the near future, in particular, 2004-2007, when supply resources are likely to be more constrained. Rather than fixed price payments for demand response programs, perhaps payments can be indexed to either actual wholesale prices, available margins during a particular month, or another proxy that encourages greater demand response participation with increasing scarcity of supply.

• *How will the role and magnitude of clean, renewable distributed generation develop, given current policies?*

The findings of the San Diego Region Energy Infrastructure Study clearly indicate that it will be increasingly difficult to meet future demand with large, baseload plants and ever-expanding transmission infrastructure, resulting in a greater role for clean, renewable, and more flexible resources.

• *What role for renewable distributed generation best meets the needs of California's economy, and reduces risk to the energy system?*

While not specifically examined as part of the REIS, there are potential societal security benefits that may be achieved by systematic deployment of distributed and renewable generation. For example, priority deployment of solar on public buildings could provide the State with a network of facilities that could be used for providing basic needs of communication, water purification and other public services during recovery from natural disasters.

ISSUE 4: STATE AND GLOBAL ENVIRONMENT

• *What actions are needed to continue protecting the environment and public health while providing efficient energy infrastructure?*

Stakeholders in the San Diego region are expressing concern over our energy decisions and their impacts on the environment. Greater research is needed in

determining the cost impacts and how to mitigate them. Care must be taken that decisions do not lead to a less reliable power system. The State should look at all sources of environmental impact and deal with the most serious sources first.

• *Can the state continue to site power plants with the existing federal and state regulatory requirements for emission reduction credits (ERC)?*

There is concern that the shortage of emission reduction credits will continue to be a barrier for needed infrastructure development in the San Diego region, possibly forcing the region to rely more heavily on imported power, and also forcing more generation in Baja California, Mexico, where emission reduction credits are not required.

The staff of the Regional Energy Office looks forward to working with the Energy Commission in developing the Integrated Energy Policy Report. SDREO has been charged with developing an updated San Diego Regional Energy Strategy (RES) working with the Regional Policy Advisory Council (REPAC). The new Regional Energy Strategy for the San Diego region will be available in the spring of 2003. We will provide the Commission a copy of that strategy when it has been approved locally.

If you have any questions, please do not hesitate to call me at (858) 244-1177 or email ist@sdenergy.org.

Sincerely,

Irene M. Stillings

Irene M. Stillings
Executive Director

Enclosure: Draft San Diego Regional Energy Infrastructure Study
Energy Issues in the California-Baja California Bi-national Region